

Remarks and Arguments:

The Specification has been amended so as to better differentiate the present invention from prior art. All previous Claims are withdrawn. New Claims are provided.

1. General:

While prior art did consider storage and return of stride energy, achieving *maximal* energy return hitherto has been a trial and error matter. The present invention is the first to provide an explicit formula and a quantitative methodology for maximizing the return of energy. The crucial teaching that differentiates the present invention from prior art, is that there is an essential prerequisite for achieving maximal energy return, and that prerequisite is *synchronization of the harmonic motion of the shoe with the frequency of stride*. Based on that teaching, it is possible in the present invention to make one additional step, that of explicitly calculating the required spring constant.

2. With regard to 35 U.S.C. 112:

New Claim 11 provides an explicit, specific methodology by which any person of ordinary skill in the art can select shoes that will provide the maximal return possible of stride energy to any given individual engaged in any given athletic activity.

3. With regard to 35 U.S.C. 102 (b):

Metro 4,429,474 does indeed discuss the possibility of varying the spring constant of the shoe in relation to the user's body weight, but with his methodology, he is only able to indicate a qualitative relation. Ronen 5,042,175 discusses changes in spring constant required for individuals of different weight, but again, that Patent provides only the suggestion " $k_1 < k_2 < k_3$ " (col. 6), without any quantitative approach to the differences required between the spring constants.

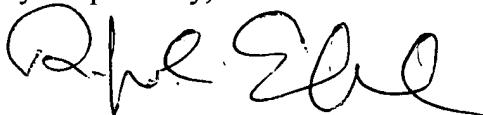
Conclusion

For all the above reasons, Applicant submits that the Specification and Claims are now in proper form, and that the Claims all define patentability over the prior art. Therefore Applicant submits that the Application is now in condition for allowance, which action is respectfully solicited.

Conditional Request for Constructive Assistance

Applicant has amended the Specification and Claims of this Application so that they are proper, definite, and define novel system which is also unobvious. If, for any reason this Application is not believed to be in full condition for allowance, Applicant respectfully requests the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. 2173.02 and 707.07(j), in order that the undersigned can place this Application in allowable condition as soon as possible and without the need for further proceedings.

Very Respectfully,



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Date: 1-2-2004